

A2  
Conceded

direction of light which is incident on the spatial light modulator 61, passes through the off-pixel 11a<sub>0</sub> and goes out of the spatial light modulator 61 is assumed to be -45°. Besides, in this example, the optical rotatory layer 63 is assumed to rotate the polarization direction of passing light by 22.5° at one passing, and therefore by 45° through forward and backward passing of the light.

REMARKS

Claims 1 - 11 are pending. By this Preliminary Amendment, the specification has been amended. Prompt and favorable examination on the merits is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten paragraph (37 C.F.R. §1.121(b)(1)(iii)).

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

William D. Titcomb  
Registration No. 46,463

JAO:WDT/can

Attachment:  
Appendix

Date: October 2, 2001

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--



## APPENDIX

Changes to Specification:

Page 19, line 24 - page 20, line 16:

The three-dimensional electromagnetic field analysis was carried out with respect to the conductor layer 111 shown in FIG. 7. In this analysis, a relation between a distance  $X$  ( $\mu\text{m}$ ) from one end face of the narrow portion 111a in the width direction and magnetic field intensity  $H_z$  ( $\text{Oe} = \times 79 \text{ A/m}$ ) in the thickness direction ( $Z$  direction) of the conductor layer 111 was obtained with respect to three positions (a), (b) and (c) in the thickness direction ( $Z$  direction) of the conductor layer 111. In this analysis, a current flowing through the conductor layer 111 was made 100 mA. Assuming the position of the bottom surface of the conductor layer 111 to be the origin, a position in the  $Z$  direction was expressed by a coordinate  $z$  which had a positive value at the upper side of the origin and a negative value at the lower side thereof. The position (a) is a position of  $Z = 0.1 \mu\text{m}$ , that is, the center position of the conductor layer 111 in the thickness direction. The position (b) is a position of  $z = 0.0 \mu\text{m}$ , that is, the position of the bottom surface of the conductor layer 111. The position ~~(b)~~(c) is a position of  $z = -0.2 \mu\text{m}$ , that is, a position  $0.2 \mu\text{m}$  distant from the bottom surface of the conductor layer 111 downward.

Page 21, line 13 - page 22, line 5:

The three-dimensional electromagnetic field analysis was carried out with respect to the conductor layer 121 shown in FIG. 9. In this analysis, a relation between a distance  $X$  ( $\mu\text{m}$ ) from one end face of the narrow portion 121f in the width direction and magnetic field intensity  $H_z$  ( $\text{Oe} = \times 79 \text{ A/m}$ ) in the thickness direction ( $Z$  direction) of the conductor layer 121 was obtained with respect to three positions (a), (b) and (c) in the thickness direction ( $Z$  direction) of the conductor layer 121. In this analysis, a current flowing through the conductor layer 121 was made 100 mA. Assuming the position of the bottom surface of the

conductor layer 121 to be the origin, a position in the Z direction was expressed by a coordinate  $z$  which had a positive value at the upper side of the origin and a negative value at the lower side thereof. The position (a) is a position of  $Z = 0.1 \mu\text{m}$ , that is, the center position of the conductor layer 121 in the thickness direction. The position (b) is a position of  $z = 0.0 \mu\text{m}$ , that is, the position of the bottom surface of the conductor layer 121. The position ~~(b)~~(c) is a position of  $z = -0.2 \mu\text{m}$ , that is, a position  $0.2 \mu\text{m}$  distant from the lower surface of the conductor layer 121 downward.

Page 29, lines 7-19:

Next, an example of a method of use and an operation of the spatial light modulator 61 of this embodiment will be described with reference to FIG. 15. In this example, a rotation angle  $+2\theta_F$  of the polarization direction of light which is incident on the spatial light modulator 61, passes through the on-pixel 11a<sub>1</sub> and goes out of the spatial light modulator 61 is assumed to be  $45^\circ$ . Further, in this example a rotation angle  $-2\theta_F$  of the polarization direction of light which is incident on the spatial light modulator 61, passes through the off-pixel 11a<sub>0</sub> and goes out of the spatial light modulator 61 is assumed to be  $-45^\circ$ . Besides, in this example, the optical rotatory layer 63 is assumed to rotate the polarization direction of passing light by  $22.5^\circ$  at one passing, and therefore by  $45^\circ$  through forward and backward passing of the light.